## ABSTRACT

A first electrode is separated from a second electrode by an interelectrode space. The interelectrode space does not exceed 3 mm, and preferably does not exceed 100 $\mu$m. Liquid water fills the interelectrode space, thereby electrically connecting the first electrode and the second electrode. A power supply, preferably low-frequency AC, is connected to the first and second electrodes, generating a current through the water in the interelectrode space. The applied electric power prevents freezing of a thin liquid water layer in the interelectrode space, thereby preventing ice formation.